



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: GENx-2B67  
 UNIQUE ID NUMBER: 11GE139  
 COMBUSTOR: TAPS  
 ENGINE TYPE: TF

BYPASS RATIO: 8.0  
 PRESSURE RATIO ( $\pi_{00}$ ): 42.4  
 RATED THRUST ( $F_{00}$ ) (kN): 299.8

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	1.1	28.2	42.4	7.1
AS % OF ORIGINAL LIMIT	5.5	23.9	34.0	40.8
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			42.5	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			46.2	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			50.7	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			56.7	

### DATA STATUS

- PRE-REGULATION  
 x CERTIFICATION  
 - REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 x DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	2.451	0.02	0.17	31.20	0.0
CLIMB OUT	85	2.2	2.012	0.02	0.28	17.94	0.0
APPROACH	30	4.0	0.701	0.06	2.53	9.58	5.5
IDLE	7	26.0	0.216	0.57	18.95	4.43	0.1
LTO TOTAL FUEL (kg) or EMISSIONS (g)			874	208	6890	10978	-
NUMBER OF ENGINES				1	1	1	1
NUMBER OF TESTS				3	3	3	3
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				0.7	23.0	36.6	5.5
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.0	5.4	0.2	1.2
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				0.67-0.74	22.57-23.44	36.35-36.79	4.61-6.86

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT All POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT All POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.4-98.6
TEMPERATURE (K)	280.5-299
ABS HUMIDITY (kg/kg)	0.00345-0.00716

### FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	15.3

MANUFACTURER: General Electric Company  
 TEST ORGANIZATION: General Electric Company  
 TEST LOCATION: PTO, Ohio  
 TEST DATES: 29/09/2009-03/10/2009

### NO<sub>x</sub> REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
	2.3.2 d) (CAEP/6)
x	2.3.2 e) (CAEP/8)

### REMARKS

1. Ref. GE REPORT R2008AE262
2. Engine S/N 956-108/2
3. Certification in accordance with Part III, Chapter 2, of Amendment 7 of ICAO Annex 16 Vol. II.
4. NO<sub>x</sub> levels in accordance with Part III, Chapter 2, 2.3.2 e) (CAEP/8)

Compliance with Fuel Venting requirements: x ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)